An Overview of Environmental Management Systems (EMS)

DOE Order 450.1 - Environmental Protection Program Workshop

an EMS

- is a formal, structured and consistent approach to identification and management of an organization's environmental issues;
- incorporates environmental considerations into day-to-day operations throughout the organization;
- is designed to promote and sustain pollution prevention and continual environmental improvement.

An Effective EMS is:

- > Flexible;
- > Transparent;
- ➤ Useful to the "practitioner";
- ➤ In harmony with mission focus;
- > Focused on continual improvement.

General Principles: An EMS

- Uses the Plan-Do-Check-Act Management Model
- Serves the organization and its mission, not the reverse
- Is a process, not an event
- Is the people & their actions, not the words & aspirations
- Rests on changing attitudes & behaviors
 - ✓ "Want to, not have to"
- •Starts at the top, <u>and</u> the bottom and is implemented throughout

WHAT IS AN ENVIRONMENTAL MANAGEMENT SYSTEM? The ISO 14001 Definition

• "The the overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy."

Major Components of an EMS

Policy

Planning

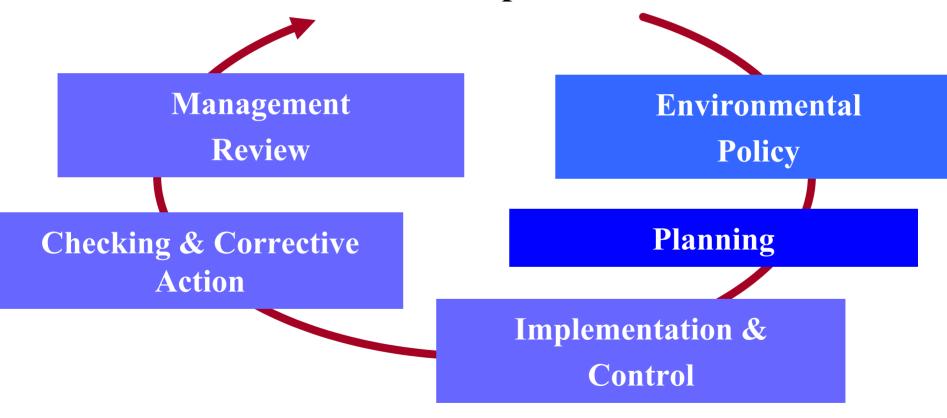
Implementation and Operation

Checking and Corrective Action

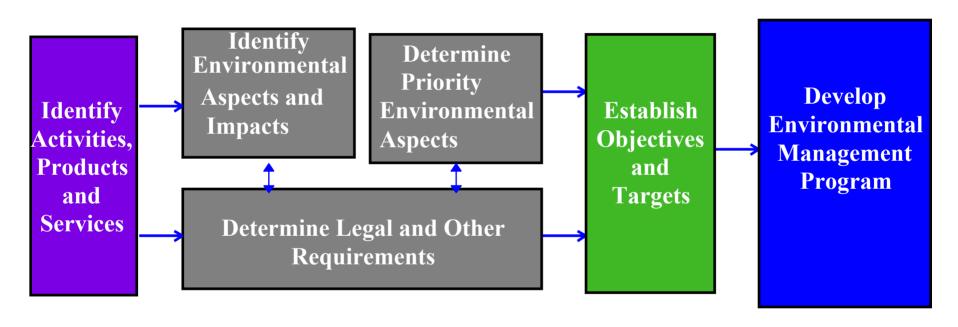
Management Review

Plan Do Check Act

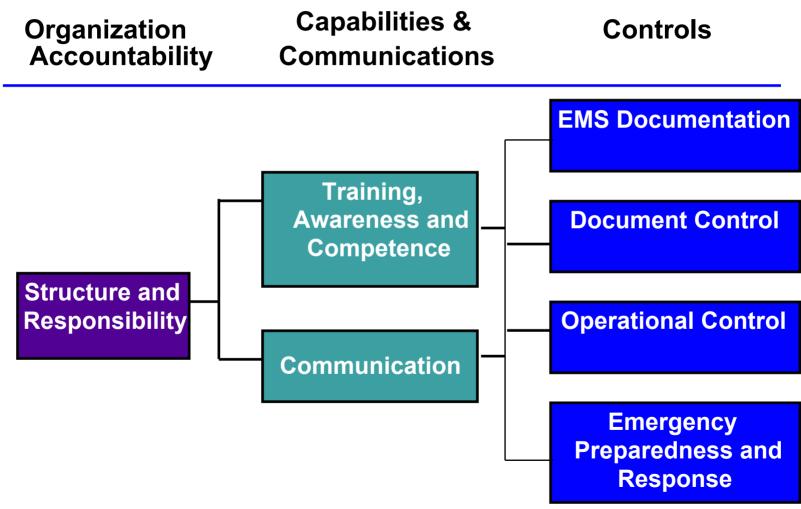
Continual Improvement



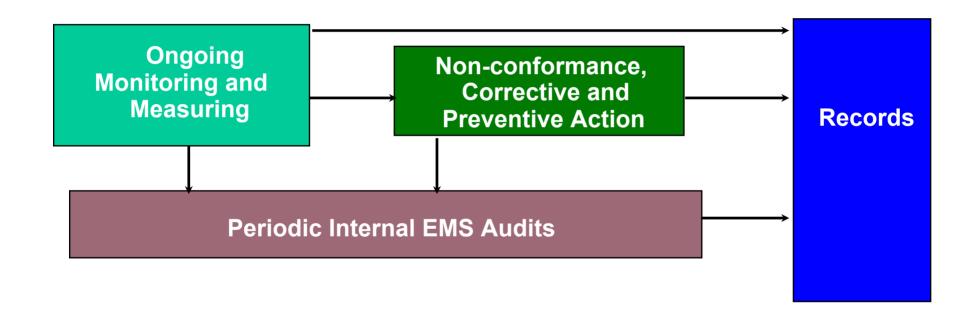
Planning



Implementation



Checking and Corrective Action



Management Review Process

Take account of:

- audit findings
- progress records on objectives changes to facilities
- changes in activities, products or services
- changes in technology
- concerns of interested parties
- other relevant information



To Assess the

- suitability,
- adequacy, and
- effectiveness of the EMS



In order to determine the need for change and improvement to:

- the environmental policy
- the objectives and targets
- other elements of the EMS

Relationship Among Environmental Management System Elements



Where Does Compliance Fit in EMS and ISO 14001?

There is "Compliance Management System" embedded within the broader "Environmental Management System"

- First- the theme of compliance is seen throughout the plan-do-check-act elements
- Second, there are specific compliance-related requirements in an EMS (such as periodic compliance audits)

Keep in mind...

- The EMS and related measurement tools are just that-tools. Alone, they will not guarantee success.
- The organization must <u>use</u> the tools, not just <u>have</u> them.
- A useful EMS is "alive"; constantly measuring performance, making adjustments, and looking for continual improvement opportunities

Conclusions

- An EMS is a formal system for managing the environmental footprint of your organization
- Most organizations already have several EMS elements in place - the system relationship is lacking
- An EMS must serve the mission of the organization
- Success comes from being committed to continual improvement for the long term